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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,820	01/14/2004	Patrick Joseph Sweeney		1819

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EXAMINER	
JACOB, MARY C	

ART UNIT	PAPER NUMBER
2123	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,820	SWEENEY, PATRICK JOSEPH	
	Examiner	Art Unit	
	Mary C. Jacob	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 January 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-7 have been presented for examination (please see Claim Objections below).

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 202. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities. Appropriate correction is required.

4. Paragraph 0002, line 9, paragraph 0011, lines 21 and 23 use (")'s instead of (')'s.

5. Paragraph 0003, lines 3-4 recite "not in line of sight from the interrogator", this appears to be a typographical error.

Claim Objections

6. Claims 1-6 are objected to because of the following informalities. Appropriate correction is required.

7. The claims as presented are listed as 1-6. However, it appears that another independent claim begins at line 4 of claim 6. Therefore, Claim 6 was treated to include lines 1-3. Claim 7, was treated to begin at line 4 of claim 6 and was treated as an independent claim.

8. Claim 6, line 3 contains a ";" at the end and should conclude with a ".".

9. Claim 7, line 3 recites "a querying a database", it should read "querying a database".

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claims 1 and 7 contain the limitation, "other information useful for simulating" in lines 4-5. It is unclear what the "other information useful for simulating" is, and the specification does not define the meaning of this limitation.

13. Claims 1 and 7 further recite the limitation "such systems" in line 5. It is unclear what "such systems" refers to. Is "such systems" referring to "radio frequency identification systems" or some other group of systems?

14. Claim 2 recites ""similar systems" in line 3. It is unclear what applicant is intending to cover by the recitation of "similar systems".

15. Claim 3 recites the limitation "the radio frequency interrogator. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diorio et al (US Patent 7,026,935) in view of Beroulle et al ("Behavioral Modeling and Simulation of Antennas: Radio-Frequency Identification Case Study", Proceedings of the 2003 International Workshop on Behavioral Modeling and Simulation, 7-8 Oct. 2003, pages 102-106).

18. As to Claims 1 and 7, Diorio et al teaches: a system for configuring an RFID system (column 3, lines 48-50) comprising a database containing radio frequency identification system component specifications and other information useful for simulating such systems and querying the database (Figure 1, elements 16, 30; column 4, lines 9-11, 51-54; column 10, line 65-column 11, line 10; column 11, lines 23-31); a user interface allowing for input and output and acquiring constraints from the user (Figure 17, element 174; column 10, lines 39-50); radio wave propagation information (column 10, lines 16-20, lines 51-55; column 13, lines 9-29); an external data network access means, sending information to and receiving information from the external data network access means (column 4, lines 18-34; column 10, lines 30-39); using input from the user interface, the database, the radio wave propagation information and the external data network access means to determine configurations and components of radio frequency identification systems meeting requirements entered via the user interface and to add and remove records from the database (column 9, lines 36-46; column 10, line 8-column 11, line 10; column 11, lines 23-31; column 11, lines 50-62; Figures 19 and 20; column 17, lines 21-41).

19. Diorio et al does not expressly teach simulating the radio frequency indentification system including sending information to and receiving information from a radio wave propagation simulator and processing the resulting data through a logical system simulator.

20. Beroulle et al teaches the use of a behavioral model of an RFID system in a simulation to validate an antenna model (Introduction, last paragraph) since the use of a

behavioral system model in a simulation allows designers to perform functional design validation earlier in the design flow, allowing the verification of equivalence between original specifications and the design (page 104, "Experimental Results", paragraph 1) wherein an RFID system is modeled (page 103, "RFID system modeling", sections A and B) using a radio wave propagation simulator, sending information to an receiving information from the radio wave propagation simulator (page 104, column 1, paragraphs 1-3) and processing data through a logical system simulator (page 104, column 2, last paragraph, "Functional validation").

21. Diorio et al and Beroulle et al are analogous art since they are both directed to the RFID systems.

22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system for configuring an RFID system as taught in Diorio et al to include the simulation of the RFID system including sending information to and receiving information from a radio wave propagation simulator and processing data through a logical system simulator as taught in Beroulle et al since Beroulle et al teaches that the use of a behavioral system model in a simulation allows designers to perform functional design validation earlier in the design flow, allowing the verification of equivalence between original specifications and the design (page 104, "Experimental Results", paragraph 1).

23. As to Claim 2, Diorio et al as modified by Beroulle et al teach: the database is updated on the basis of information acquired from other similar systems via the external

data network access means (Diorio et al: column 10, lines 30-47; column 13, line 61-column 14, line 16).

24. As to Claim 3, Diorio et al as modified by Beroulle et al teach: the database is updated on the basis of information acquired from the radio frequency interrogator (Diorio et al: column 11, lines 23-31, lines 50-62).

25. As to Claim 4, Diorio et al as modified by Beroulle et al teach: the user interface acquires and presents information primarily via text (Diorio et al: column 10, lines 41-50; Beroulle et al: page 104, section C, last paragraph).

26. As to Claim 5, Diorio et al as modified by Beroulle et al teach: the user interface acquires and presents information primarily through graphics (Diorio et al: column 10, lines 41-50; Beroulle et al: Figures 6-8).

27. As to Claim 6, Diorio et al as modified by Beroulle et al teach: one or more radio frequency interrogators to provide physical-world input and output for the logical system simulator (Diorio et al: Figure 6; column 5, lines 12-15; column 14, line 61-column 14, line 8; Beroulle et al: page 104, column 1, paragraphs 1-3).

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

29. Lim et al ("A Study on the Design of Large-Scale Mobile Recording and Tracking Systems", Proceedings of the Thirty-First Hawaii International Conference on System Sciences, Volume 7, pages 701-710, January 1998) teaches analyzing the performance

of RF tags protocols and database mechanisms using process-oriented discrete-event simulation tools.

30. Dinnyes et al ("Experimental Examination of the Logistics Parameters of an Inductive Radio Frequency Identification System", Periodica Polytechnica Ser. Transp. Eng. Volume 27, No 1-2, pages 101-112, 1999) teaches a measuring and analyzing method to examine the logistics parameters and to simulate their effects on each other in an RFID system to help end-users choose the proper RFID system to be used in a given application.

31. Dove et al (US Patent 5,999,861) teaches a method and apparatus presented for designing an RF modular hybrid circuit assembly that includes a data library of RF hybrid elements, provided to facilitate rapid prototyping.

32. Minarik (US Patent 5,339,087) teaches a wavefront simulator that emulates plane wave propagation from multiple transmitting antennas used to evaluate, an array processor used in RF communications to determine the location of transmitting antennas and possibly to perform beamforming for canceling the energy of an interfering transmitter.

33. Stilp (US Patent 7,091,827) teaches a system and method for controlling communications in a security system based upon RFID techniques wherein a controller of the security system determines which RFID readers may transmit, at what times, and the parameters with which to transmit.

34. Landt (US Patent 6,677,852) teaches a system and method for automatically controlling or configuring a device such as an RFID Reader.

35. Wood, Jr., (US Patent 6,104,333) teaches methods of processing wireless communication including providing at least one interrogator configured for transmitting and receiving wireless communication data and a plurality of identification devices are that are configured for receiving the data transmitted and capable of generating and transmitting a reply back to the interrogator.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary C. Jacob whose telephone number is 571-272-6249. The examiner can normally be reached on M-F 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Mary C. Jacob
Examiner
AU2123

MCJ
10/25/06

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